

# Work Order ID 73330

Wednesday, August 31, 2011 11:02:14 AM



Page 1

Item ID: D3564-5

Revision ID:

Item Name: Wearshoe

Start Date: 9/1/2011 Start Qty: 16.00

Required Date: 9/15/2011 Req'd Qty: 16.00

Reference:

Approvals: Process Plan: MWF Date: 11-08-01 Tooling: \_\_\_\_\_ Date: \_\_\_\_\_  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start   
Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3564	Rev D								

100

0.00



Waterjet

FLOW WATER JET

Memo

0.00

FLOW CNC Waterjet

1-Cut as per Dwg D3564 ☐ Dwg Rev: D ☐ Prog Rev: D ☐ 2-  
Deburr if necessary

1311-9-1

304 . 063



110

0.00



QC

QC2- Inspect parts off machine FAI/FAIB

Memo

0.00

Quality Control

1311-9-1

120

0.00



QC

QC8- Inspect parts - second check

Memo

0.00

Quality Control

Subtotal

counts



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**Work Order ID 73330**

Wednesday, August 31, 2011 11:02:14 AM

Page 2

Item ID: D3564-5

Accept

Setup Start

Revision ID:

Stop

Item Name: Wearshoe

Start Date: 9/1/2011 Start Qty: 16.00

Required Date: 9/15/2011 Req'd Qty: 16.00

Cust Item ID:

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

130



Brake NC

NC BRAKE

0.00

Memo

0.00

Brake NC

Deburr if necessary ☐ Form on Brake as per Dwg D3564 using Jigs DT8179 and DT8155 ☐ Form Joggle as per Dwg D3564 on brake using Jig DT8157

140



QC

QC5- Inspect part completeness to step on W/O

0.00

Memo

0.00

Quality Control

Ensure joggle as per dwg D3429

150



Powdercoat

Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3

0.00

Memo

0.00

Powder Coating

START TIME: \_\_\_\_\_ COVEN TEMPERATURE: \_\_\_\_\_

☐ FINISH TIME: \_\_\_\_\_

3200F

8:20

M117338

SP 11/6/01  
22  
5/11/09/01 (22)

8/11/01

(22)

22 X 0 M 11/09/02

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 73330

Wednesday, August 31, 2011 11:02:14 AM



Page 3

Item ID: D3564-5

Accept



Setup Start



Revision ID:

Item Name: Wearshoe

Stop



Start Date: 9/1/2011 Start Qty: 16.00



Cust Item ID:

Required Date: 9/15/2011 Req'd Qty: 16.00



Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start



Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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160 QC3- Inspect Part Finish

0.00



QC Memo

0.00

Quality Control

22 0 11/09/02

170 Identify as per dwg & Stock Location: FP-1

0.00



Packaging Memo

0.00

Packaging

22 0 11/09/02

180 QC21- Final Inspection - Work Order Release

0.00



QC Memo

0.00

Quality Control

11/9/02  
MF  
11-09-02

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

Wednesday, August 31, 2011 11:02:11 AM

Page 1

Work Order ID: 73330



Parent Item: D3564-5



Parent Item Name: Wearshoe



Start Date: 9/1/2011

Required Date: 9/15/2011

Start Qty: 16.00

Required Qty: 16.00

Comments: IPP Rev:A New Issue 07-03-08 ec  
IPP Rev:B As per Rev C 07-07-09 JLM  
IPP Rev:C As per Rev D 07-09-09 JLM Verified By:EC  
IPP Rev D added DT# 08.04.21 DD Verified by EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304S16GA 		Purchased	No			100	sf	129.1000	1.5	25.26316		32	
304/316 Sheet .063											B11-9-1		

Location	Loc Qty	Loc Code
MAT020	116.5	
118578	116.5	
MAT021	12.6	
118217	12.6	

118578

22

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

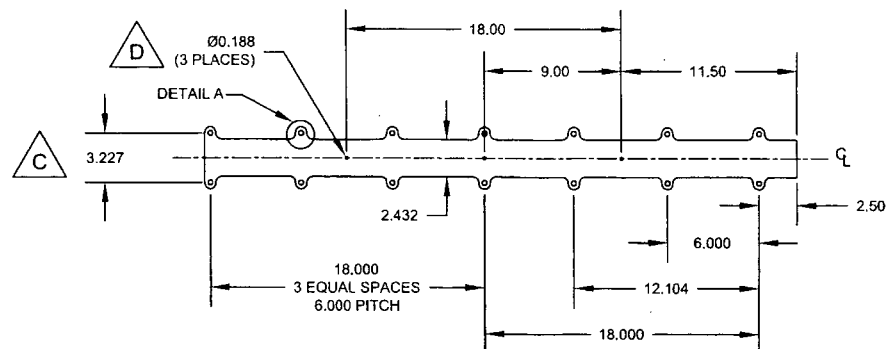
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



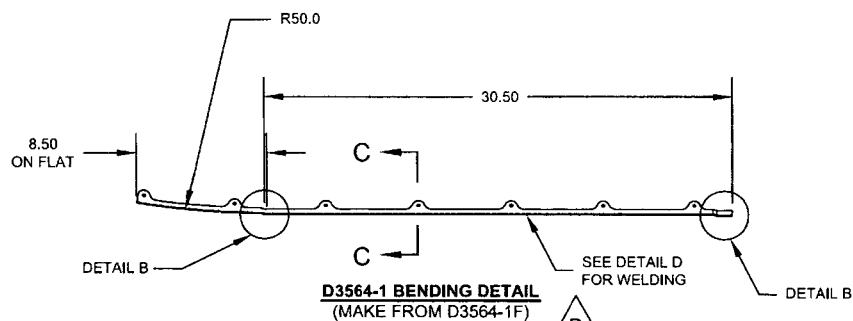


**D3564-1F FLAT PATTERN**

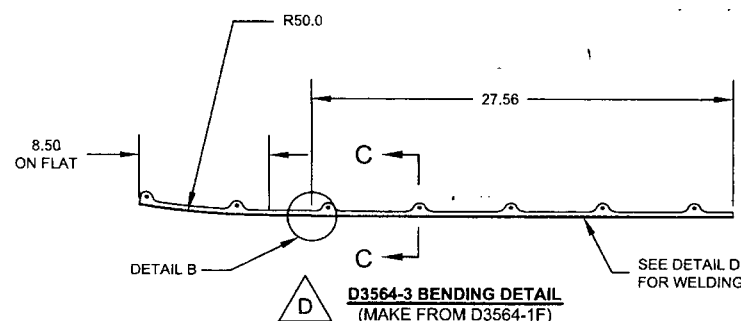
#73330

RELEASED

07.09.04



**D3564-1 BENDING DETAIL**  
(MAKE FROM D3564-1F)



**D3564-3 BENDING DETAIL**  
(MAKE FROM D3564-1F)

**D3564-1/-3/-5/-7/-9/-11/-13/-15 WEARPLATE NOTES:**

- 1) MATERIAL: AISI 304/316 SS SHEET PER AMS 5513 OR AMS 5524, 16 GAUGE (0.063 THICK)  
(REF DART MATERIAL SPEC M304S16GA)
- 2) FINISH: POWDER COAT GREY SANDTEX (REF 4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.015 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: SEE TABLE IN ZONE A3
- 8) WELD PER DART QSI 004
- 9) SEE PG 3 FOR SECTIONS AND DETAILS
- 10) PARTS ARE SYMMETRIC ABOUT C

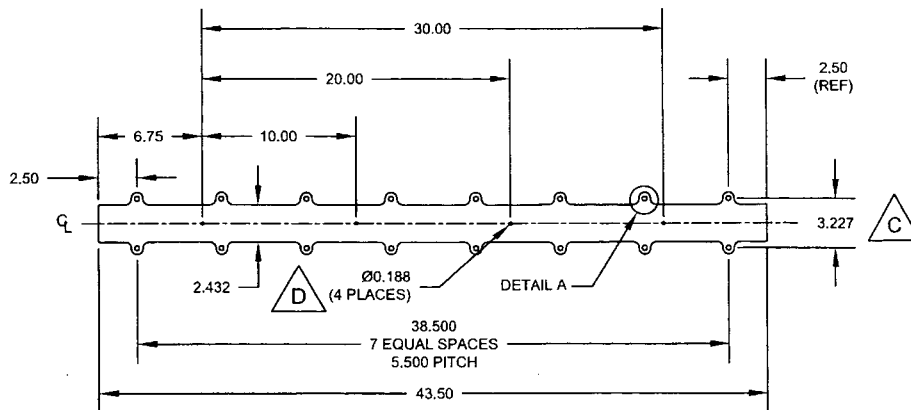
WEIGHTS:	
D3564-1	1.85 lbs
D3564-3	1.85 lbs
D3564-5	1.93 lbs
D3564-7	1.26 lbs
D3564-9	1.85 lbs
D3564-11	1.85 lbs
D3564-13	0.38 lbs
D3564-15	0.80 lbs

D	UPDATE DRAWING TEMPLATE; CHANGE ALL (TYP X PLS) TO (X PLACES); PG1 A8: UPDATE NOTES; PG1 A8, PG3 B5,C5: ADD D3564-15; PG1 B6,B3: D3564-1/-3 WAS ONE FIGURE; PG2 A7,A3: D3564-9/-11 WAS ONE FIGURE; PG2 A7,A3: D3564-9/-11 WAS ON PG1; PG3 B8,C8: D3564-13 WAS ON PG2; PG3 D2: WELDING DETAIL WAS ON PG1 PG3 A5,7,B2: RELOCATE DETAILS AND SECTION; PG3 A5,7,B2: INCREASE DETAIL AND SECTION SIZE	CB	07.08.21
C	MOVE TAB OUTBOARD, DETAIL A	PH	07.04.17
B	ADD AMS 5513 AND AMS 5524	PH	07.03.20
A	NEW ISSUE	PH	06.12.18
REV.	DESCRIPTION	BY	DATE

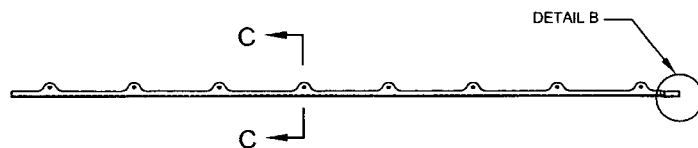
DESIGN	PH	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	REV. D
DRAWN	CB		
CHECKED	PH		
MFG. APPR.	PH		
APPROVED	PH		
DE APPR.	PH	DRAWING NO. D3564	SHEET 1 OF 3
DATE	07.08.21	TITLE WEARSHOE	SCALE 1:

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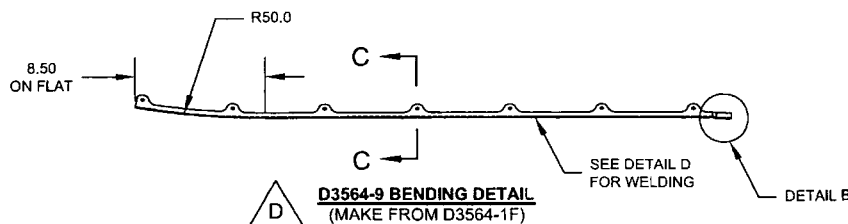
8 7 6 5 4 3 2 1



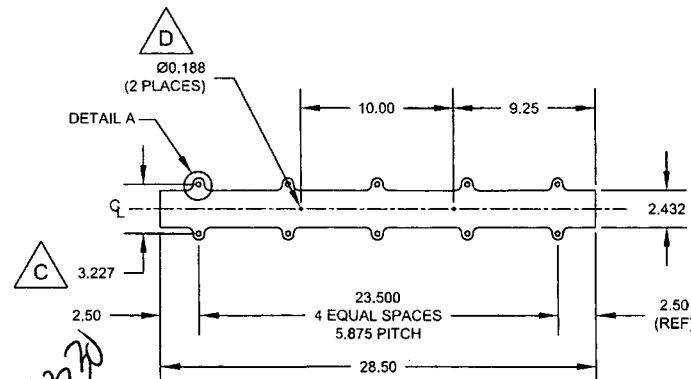
**D3564-5F FLAT PATTERN**



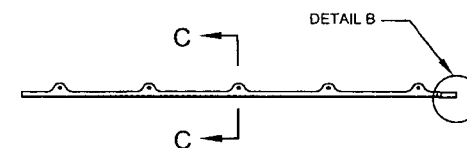
**D3564-5 BENDING DETAIL**  
(MAKE D3564-5 FROM D3564-5F)



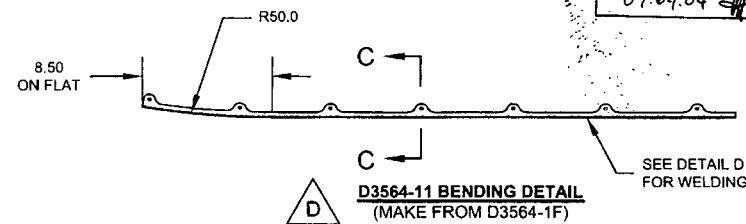
**D3564-9 BENDING DETAIL**  
(MAKE FROM D3564-1F)



**D3564-7F FLAT PATTERN**



**D3564-7 BENDING DETAIL**  
(MAKE D3564-7 FROM D3564-7F)



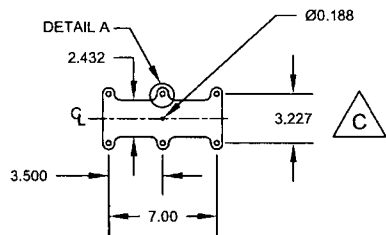
**D3564-11 BENDING DETAIL**  
(MAKE FROM D3564-1F)

RELEASED  
07.09.04

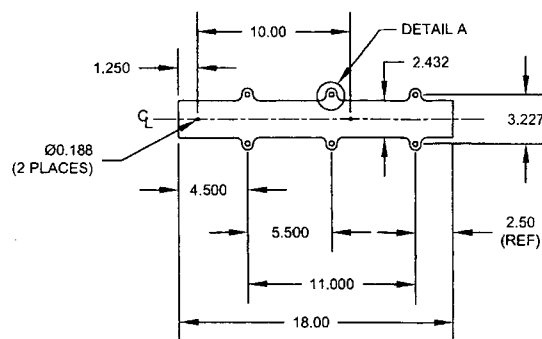
DESIGN	PH	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	CB		
CHECKED	PH	DRAWING NO.	REV. D
MFG. APPR.	PH	D3564	SHEET 2 OF 3
APPROVED	PH	TITLE	SCALE
DE APPR.	PH	WEARSHOE	1:8
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8 7 6 5 4 3 2 1

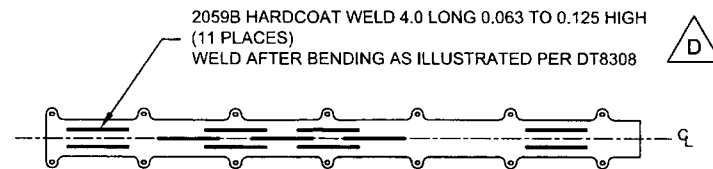
8 7 6 5 4 3 2 1



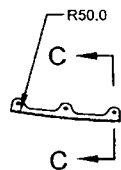
**D3564-13F FLAT PATTERN**



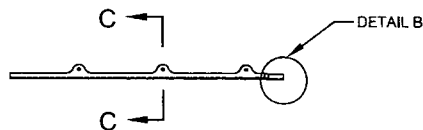
**D3564-15F FLAT PATTERN**



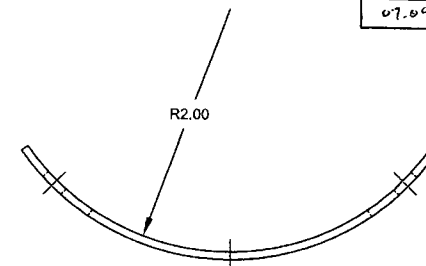
**DETAIL D**  
(D3564-1/-3/-9/-11 WELDING DETAIL)



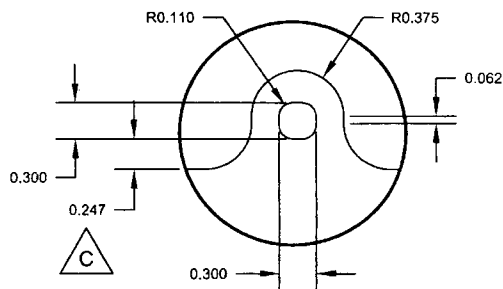
**D3564-13 BENDING DETAIL**  
(MAKE D3564-13 FROM D3564-13F)



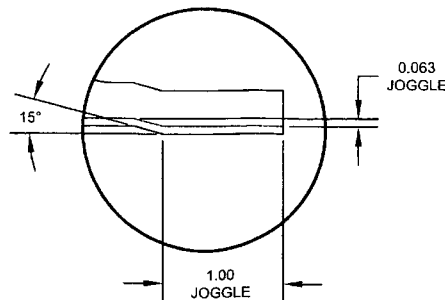
**D3564-15 BENDING DETAIL**  
(MAKE D3564-15 FROM D3564-15F)



**SECTION C-C**  
SCALE 1:1



**DETAIL A**  
SCALE 1:1



**DETAIL B**  
SCALE 1:1

**RELEASED**

07.09.04

DESIGN	PH	<b>DART AEROSPACE LTD</b>	
DRAWN	CB	HAWKESBURY, ONTARIO, CANADA	
CHECKED	PH	DRAWING NO.	REV. D
MFG. APPR.	PH	D3564	SHEET 3 OF 3
APPROVED	PH	TITLE	SCALE
DE APPR.	PH	WEARSHOE	1:8
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8 7 6 5 4 3 2 1

<b>DART AEROSPACE LTD</b>		<b>Work Order:</b> 7333 0
<b>Description:</b> Wearshoe		<b>Part Number:</b> D3564-5
<b>Inspection Dwg:</b> D3564	<b>Rev:</b> D	<b>Page 1 of 1</b>

### FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
43.50	+/-0.030	43.50	2		T B01	
6.75	+/-0.030	6.75	2		T	
10.00	+/-0.030	10.00	2		T	
20.00	+/-0.030	20.00	2		T	
30.00	+/-0.030	30.00	2		T	
2.50	+/-0.030	2.50	2		V B02	
3.227	+/-0.010	3.225	2		V	
38.500	+/-0.010	38.500	2		T	
5.500	+/-0.010	5.500	2		T	
2.50	+/-0.030	2.50	2		V	
2.432	+/-0.010	2.439	2		V	
0.300 x 0.300	+/-0.010	0.303 x 0.302	2		V	
Ø0.188	+0.005/-0.001	0.191	2		V	
R0.375	+/-0.010	0.375	2		R.G	
0.063	+/-0.010	0.061	2		V	

<b>Measured by:</b> RB	<b>Audited by:</b> S	<b>Prototype Approval:</b>	N/A
<b>Date:</b> 11-9-1	<b>Date:</b> 11/09/01	<b>Date:</b>	N/A

Rev	Date	Change	Revised by	Approved
A	08.01.16	New Issue	KJ/EC/DD	DS